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ABSTRACT

The California Community College's (CCC) funding over the past two decades was examined in order to assist the 2005 Task Force of the Chancellor's Consultation Council develop strategies to address the challenges of the future. Findings comparing 1995 to 1975 indicated that: (1) CCC general revenues have tripled, but this increase is less than that for the University of California, the California State University, K-12 schools, and for private California corporations; (2) the CCC share of total state and local tax revenues has decreased by 27%; and (3) tax payer effort for CCC has decreased by 44%, far greater than the decline in tax effort for all state and local purposes. Moreover, despite low fees, CCC taxpayer support per student is lower than in virtually every other state. CCC costs per student are three-fifths of those in community colleges elsewhere because of larger classes, heavier faculty class loads, and smaller administrative, plant maintenance, and other costs. In addition, CCC costs have risen 1% in constant terms, versus 25% in colleges elsewhere, since 1970. Funding levels must grow by a greater percentage to pay for more sophisticated equipment, greater use of labs, and smaller pre collegiate and English as a second language classes. (YKH)

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Funding Patterns in California Community Colleges

A Technical Paper for the 2005 Task Force of the Chancellor's Consultation Council

November 1997

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Summary

Funding Patterns is one of four technical papers prepared for the use of the 2005 Task Force of the Chancellor's Consultation Council. This Task Force was formed in Spring 1997 and asked to help the Board of Governors and Chancellor develop strategies to address the challenges of the future facing the California Community Colleges. The other technical papers in this series include: *Trends Important to Community Colleges, Access, and Future Scenarios.*

This paper examines California Community College funding over the past two decades: have revenues kept pace with enrollments and with the cost of doing business? What has happened to the CCC tax share and the relative taxpayer effort? How do CCC expenditures compare with those of colleges in other states?

In summary, comparing 1995 to 1975, two decades earlier:

- *CCC general revenues have tripled, but*
- *This increase is less than that for UC, CSU, K-12, and for private California corporations*
- *CCC share of total State and local tax revenues has decreased by twenty-seven percent*
- *Tax payer effort for CCCs has decreased by forty-four percent, far greater than the decline in tax effort for all state and local purposes (-27%)*

Moreover,

- *Despite its low fees, CCC taxpayer support per student is lower than in virtually every other state*
- *CCC costs per student are three-fifths of those in community colleges elsewhere, because of:*
  - » *larger classes*
  - » *heavier faculty class loads*
  - » *smaller administrative, plant maintenance, and other costs*
- *CCC costs have risen 1% in constant terms, versus 25% in colleges elsewhere, since 1970*
- *Real costs should be up by a greater % for more sophisticated equipment, greater use of labs, and need for smaller precollegiate and English as a second language classes.*

Introduction

Funding Patterns is one of four technical papers prepared for the use of the 2005 Task Force of the Chancellor's Consultation Council. This Task Force was formed in Spring 1997 and asked to help the Board of Governors and Chancellor develop strategies to address the challenges of the future facing the California Community Colleges. The other technical papers in this series include: *Trends Important to Community Colleges, Access, and Future Scenarios.*

Much of the discussion to date in the 2005 project has centered around the accessibility and quality of California Community College (CCC) education. Pertinent to both access and quality are questions of how (well) community colleges have been funded over time. Have revenues kept pace with enrollment gains and changes in the cost of doing business? Are Californians putting forth the same tax effort for the CCCs as in the past? Are the Colleges receiving a consistent share of tax revenues, from both state and local sources? How are CCCs funded compared to other sectors of California education; other public goods? How have expenditures per student, when adjusted for cost-of-living (COLA) changed over time? How do CCC costs compare with those reported by community colleges in other states? What does all this suggest about the quality of college education? These and other issues are discussed below.

College Revenues

The bulk of revenue supporting the general operations of CCCs derives from local property taxes, State General Funds, and student enrollment fees. While *total revenues have increased* during the past thirty years, there have been some dramatic fluctuations (Chart 1):

rapid increases in	mid 1970s late 1980s
decreases or slowing in	1978 (result of Proposition 13) early 1980s early 1990s

During the past two decades, CCC general revenues have increased by about three times:

Total General Revenues or Income
($ billions)

	1975	1995	Change	% Change
Community Colleges	$ 1.01	$ 2.87	$ 1.86	184%
University of California	0.65	2.50	1.85	285
California State University	0.58	2.13	1.55	267
K-12	2.64	17.54	14.90	564
Other State General Funds	6.07	22.23	16.16	265
CA private corporations	8.00	37.00	29.00	362

The CCCs increase is less than that for the other public segments of education, less than the increase in State General Fund revenues for other than education, and less than the growth in net income reported by California private corporations. During this period, K-12 revenues increased by nearly seven times.

Until Proposition 13 (1978), property taxes had comprised over half of CCC revenues. With property tax reform, the State General Fund then predominated from 1978 to 1993, when further reform in the sharing of local property taxes once again increased the reliance of CCCs on this local source of revenue. Finally, because of the recent economic recovery, increases in State General Fund support of CCCs—through the Proposition 98 (1988) guarantee—has resulted in General Funds once more comprising the larger share.

Another way of viewing CCC revenue trends is to assess them as a *proportion of the total tax revenues* from which they are derived (Chart 2). Currently, the CCCs'

share of local property tax revenues (6%) is as high (except for 1977) as it has been in three decades. This is not true of the State General Fund "share." After fluctuating between 4% and 5% of State General Funds during the 1970s and 1980s, CCCs share of State General Funds has increased to just above 3%, its lowest level since the late 1960s.

The CCC share of total State General Fund and local property tax revenues increased rapidly during the late 1960s and 1970s, peaking at nearly 6% in 1980. Since that time it has dropped to a low of just over 4%, the lowest level since the late 1960s. In the last two decades:

CCC Share of Total State and Local Revenues

	(Ratio)	% Change
1975	0.0568	
1995	0.0412	
Decrease	0.0156	-27.4%

A third way of analyzing CCC revenues is to examine changes over time in the *tax effort by California tax payers for CCCs*: tax revenues as a proportion of the tax bases (personal income and assessed property valuation) from which the revenues are derived. From the mid-1960s to the late 1970s, property tax revenues were a much larger proportion of assessed valuation than State General Fund tax revenues were of Californians' personal income (Chart 3). And at that time, both measures were increasing dramatically.

Proposition 13 (1978) changed this trend in two ways. Property tax rates (tax revenue/assessed value) in support of CCCs were cut by more than half in 1978, and by 1982, had dropped to less than one-tenth of one percent (<.1%) and have remained at that level to this day. General Fund tax rates (revenues/personal income) initially increased after passage of Proposition 13 (1978), then began a long decrease until today's rates equal those of 1972. Taking total tax revenues as a proportion of personal income (the source for most tax payments) to measure tax effort, CCCs have experienced a dramatic decline in the past two decades:

Total Tax Revenue Share (Ratio) of California Personal Income

	CCC	All State +
1975	0.0066	.1155
1995	0.0037	.0843
Decrease	0.0029	.0312
% Change	-43.7%	-26.9%

The decline of 44 percent for CCC contrasts dramatically with the overall decline of just 27 percent in taxes collected for all state and local services from General Fund and property taxes. And based on Chart 1, the effort for other sectors of education has not declined to the same degree as for CCCs.

Still another assessment of CCC revenues can be made in relation to community colleges in other states. California's total revenues per student, from taxes and student tuition and fees during 1993-94 were among the country's lowest (Charts 4 and 5):

Revenue per FTE Student

	California	10 Large	39 Other States
Tuition and Fees	$405	$1,618	$1,653
State and Local Taxes	3,454	4,039	3,814
Total Revenue*	4,525	6,665	6,701

*Including federal and other sources.

Despite low fees, the *taxpayer contribution* toward CCCs in California is less per FTE student than it is in virtually every other state. Among ten states with large numbers of community colleges, only Michigan and Pennsylvania provide fewer revenues per student from state and local taxpayers.

Notably, other states charge and collect far more tuition and fee revenue (charge less aid) than does California. The impact of these policies and practices on access is substantial; details are presented in the paper on *Access*.

College Expenditures

The CCCs fiscal condition and the implied quality of instruction can be examined by a review of the colleges' expenditure levels: per student, over time, adjusted for price changes, in relation to community college outlays in other states; and as to what the programmatic implications are from these comparisons.

CCCs expenditures per student historically have been below those of two-year colleges in other states, and this gap has widened during each decade since 1970 according to NCES (1996):

College Educational and General Expenditures Less Student Aid and Transfers per Full-Time Equivalent Credit Student

	California	% Annual Change	National*	% Annual Change	CA/Nat"l. Ratio
1970-71	$911		$1,318		.72
1980-81	2,001	+7.6%	2,843	+8.0%	.70
1990-91	3,424	+5.5%	5,367	+6.6%	.63
1993-94	3,554	+1.9%	6,022	+3.9%	.59

(*The differences between California community colleges and those in other states are even more dramatic, since California is a large part of the national base.)

A slightly different picture emerges when these nominal (current) expenditure values are adjusted for changes in the prices of those resources the colleges must purchase to do business: salaries, benefits, service contracts, supplies, and equipment. Using the State and Local Government Purchases Index as the appropriate deflator for both series, we find that the California Community Colleges, with some minor fluctuations, have essentially the same resource purchasing power as they have had over the past twenty-five years, ranging between $3,000 and $4,000 per student, while colleges elsewhere have fluctuated between $5,000 and $6,000 per student (Chart 6):

	California	% Chg	National	% Chg
1970-71	$3,508		$4,811	
1993-94	3,554	+1%	6,022	+25%

While California's resources per student have changed little, resources reportedly employed by community colleges in other states (excluding California) increased by one-fourth. And most of this increase took place during the 1980s.

There are a number of reasons why CCCs operate at a lower cost per student than do community colleges elsewhere in the country, but it isn't clear why the CCCs resources per student have changed so little over the past two decades, particularly in light of increases elsewhere. In fact, growth patterns in Chart 6:

Community College FTE Credit Enrollment

	California	Other States
1970-71	526,000	976,000
1993-94	823,000	2,469,000
increase	297,000	1,493,000
%	+ 57%	+122%

showing that the rest of the country grew twice as fast as California during the past two and one-half decades, would suggest that the constant cost per student should have grown at a lesser rate per student in other states than in California. This was not the case, however.

In contrast to the scale-economies inherent in growth, there are a number of reasons why the community colleges' resources per student should increase over time. Factors like increasingly sophisticated instructional equipment (because of increasing technology); smaller class sizes due to increasing use of laboratory, discussion, and problem-solving groups; increasing need for out-of-class services for immigrants (speaking English as a Second Language); among others, argue for a higher level of resources today than was the case two or three decades ago.

Outlays for specific college functions, price-adjusted and per student, offer further insight. Just over half (52%) of student costs are reported to be in *classroom instruction*, whether in California or elsewhere (Chart 7). However, the outlays per student for instruction in California, nearly three-fourths of the national average twenty years ago, are now just 59% ($1,750 vs. $2,952). In real, price-adjusted terms, California's instructional outlays per student have declined by 4% since 1970.

In the area of community or public services, California trends differ substantially from those of other community colleges nationally (Chart 7). During the 1970s, CCC community service efforts were increasing moderately in relation to what was then very rapid FTE student growth. Following passage of Proposition 13 (1978) and loss of the special local property tax for community services, the resources devoted to this function have declined by about one-third in California. By contrast, elsewhere the trend is just the opposite: a greater than one-third increase in public or community service resources per FTE is reported over the same two-decade period by community colleges outside California. By 1993-94, the CCC were spending $52 per credit FTE student on community services, about one-third of the levels reported by colleges elsewhere; the national average, including California, is $141. Some of this difference

may be explained by the fact that colleges in other states offer many of the same classes in community services as are offered by California in regular noncredit instruction.

California's lower cost per FTE student for instruction is the result of a much higher student:faculty ratio than is the case elsewhere (Chart 8). This higher ratio can be attributed to the fact that California's:

- average class load (>16 hours per week) is greater by 2 hours, than loads elsewhere
- average class sizes (29) are greater by 10 than the U.S. average: (19)

California's costs are lower even though full-time salaries are, on average, higher in CCC than in other colleges nationally (Chart 9). Higher full-time salaries could be compensated by greater use of part-time faculty—generally paid at just over half the rate of full-timers--but, there is no valid evidence that CCC use more part-timers than is the case elsewhere.

As in other functions, California community colleges report that student service outlays per FTE student are below those of colleges elsewhere (Chart 10). However, in this exceptional case, expenditures have increased dramatically since the early 1980s.

Unit costs for community college library and media services have been decreasing since the late 1970s both in California and nationally (Chart 10). By contrast, outlays for administration (per FTE student) have been increasing moderately in California and substantially in other states since the early 1980s (Chart 11). Finally, CCC outlays for maintenance and operation of plant are under half those reported by colleges elsewhere, and have been generally stable over the past two decades.

Implications of Expenditures

Implications of funding patterns for CCC education over the past two decades are clear in the case of access, but unclear in the case of quality.

As we show in the paper on *Access*, the participation of California adults in community colleges since 1975 has dropped from 85 enrollment per 1,000 adults to 59/1000. Even accepting the need to maintain and upgrade the vigor of CCC curriculum and the growth of competitor (proprietary) institutions in meeting the demand for vocational training, there are plausible arguments for CCCs serving over 70/1000. The current level of CCC service has little to do with Californians' educational needs, but has resulted largely from funding constraints; some intended (1983 and 1984 policies), some entirely unintended (1992-94).

The impact of funding on the quality of CCC programs and services isn't as clear. The resources available per CCC student are far less than is the case for community colleges in other states. In large part, this is due to scale economies: the average CCC enrolls 12,000 students, compared to 5,000 in community colleges across the country. This is reflected in larger classes (by about 10 students), but CCC faculty also teach more class hours. Nonteaching cost differences between California and other states are similar.

To assess the impact of funding patterns on the quality of CCC programs and services requires a thorough comparison of the value added to students. This is not currently done because outcome measures like retention, persistence, program completion, employment, wages, and transfer—with a few notable exceptions—have no benchmarks for analysis, either over time or across states.

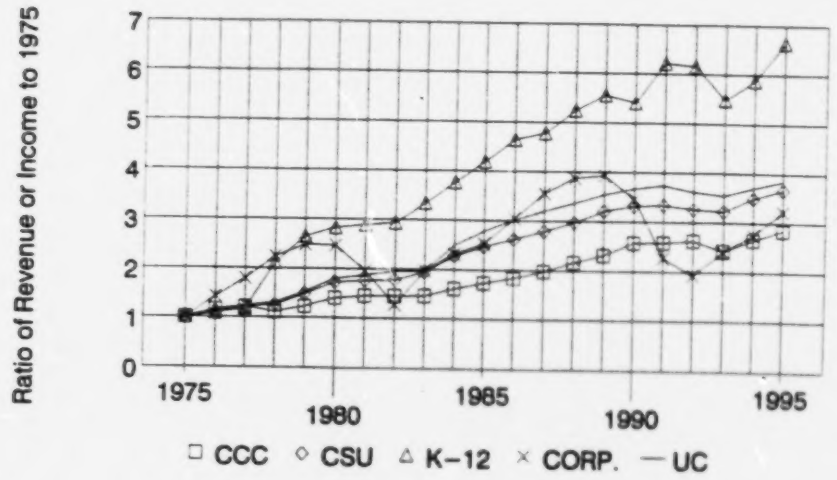
One conclusion is, however, suggested by the trends observed. Real (price-adjusted) expenditures per student should have

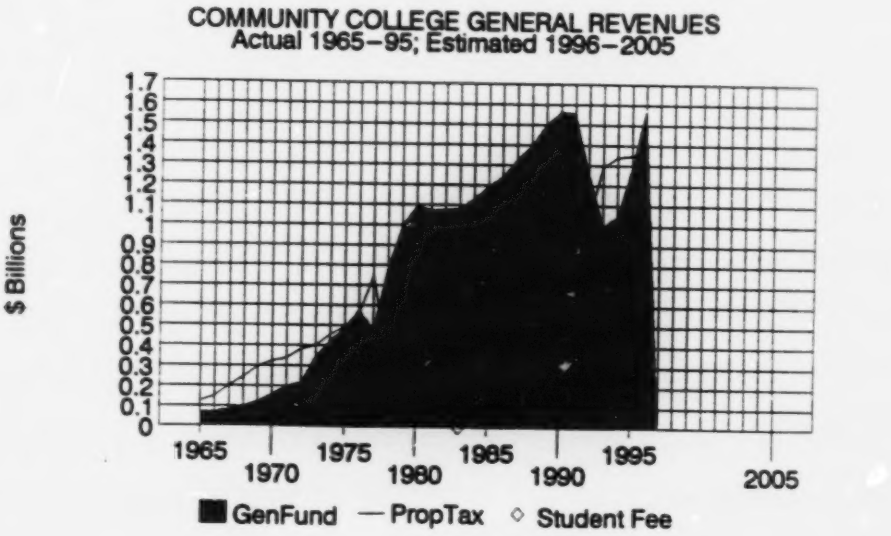
- increased from:
  - » shift from lecture to laboratory teaching methods
  - » increased sophistication of instructional equipment with increasing technology
  - » increased need for smaller precollegiate and ESL classes
  - » increased need for out-of-class services for immigrants, welfare recipients
- offset:
  - » larger classes from college growth
  - » use of distance learning and other technology

On balance, these factors appear to support an argument for increasing real costs. And this increase has taken place in community colleges throughout the nation, but it

has not in California. Also, to date, distance learning has had little impact. So, apart from rapidly increasing out-of-class outlays for special populations (disadvantaged, immigrants, welfare recipients), California funding per student has not kept pace with emerging trends that suggest the need for increases in real outlays. The ability of institutions to keep pace with these developments will become more important as competitors increasingly utilize cost-effective distributed learning techniques. (See section on competitors in paper on *Access*.)

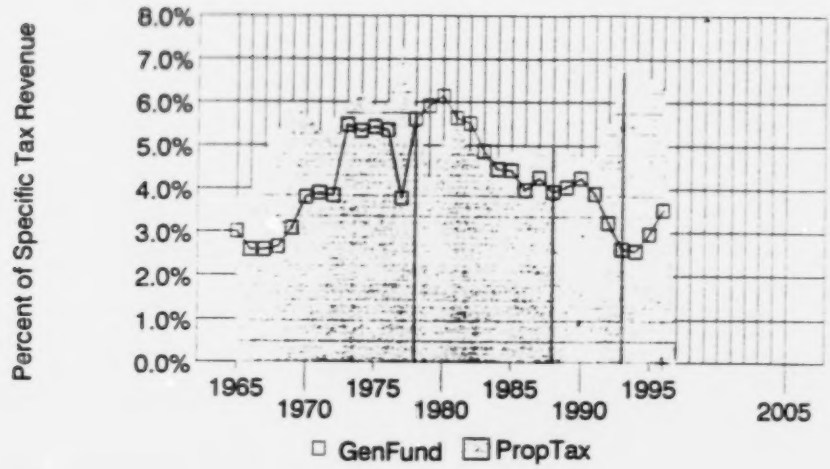
Chart 1
Trends in Total General Revenues California Education and Corporations and Community College General Revenues
1965-95 Actual; 1996-2005 Estimated



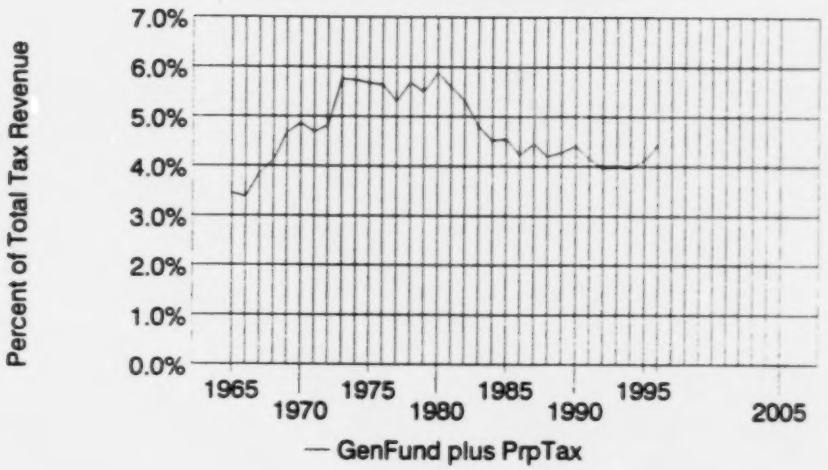


Sources: Chancellor's Office, 1997; California Postsecondary Education Commission, 1996.

Chart 2
Community College Tax Shares
1965-95 Actual; 1996-2005 Estimated

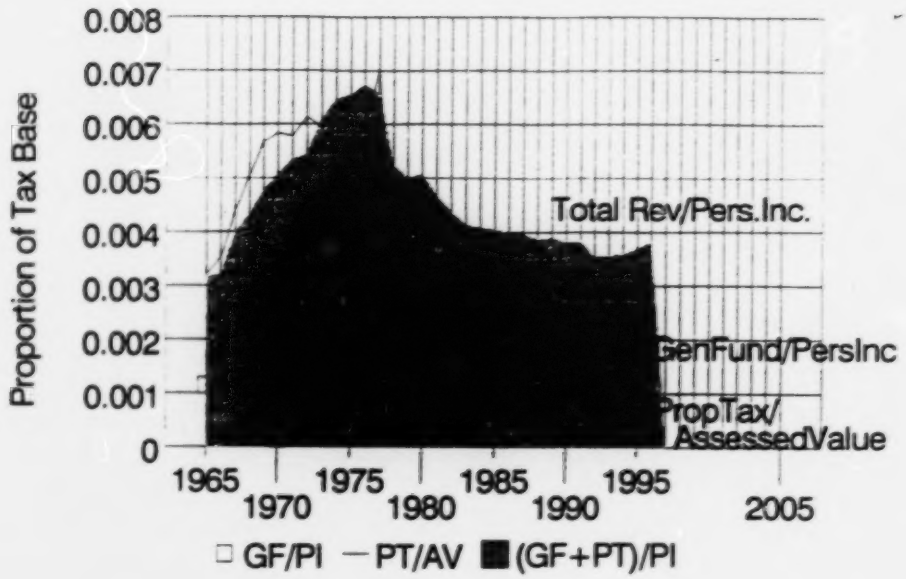


COMMUNITY COLLEGE TAX SHARE
Actual 1970–95; Estimated 1996–2005



Sources: Chancellor's Office, May 1997.

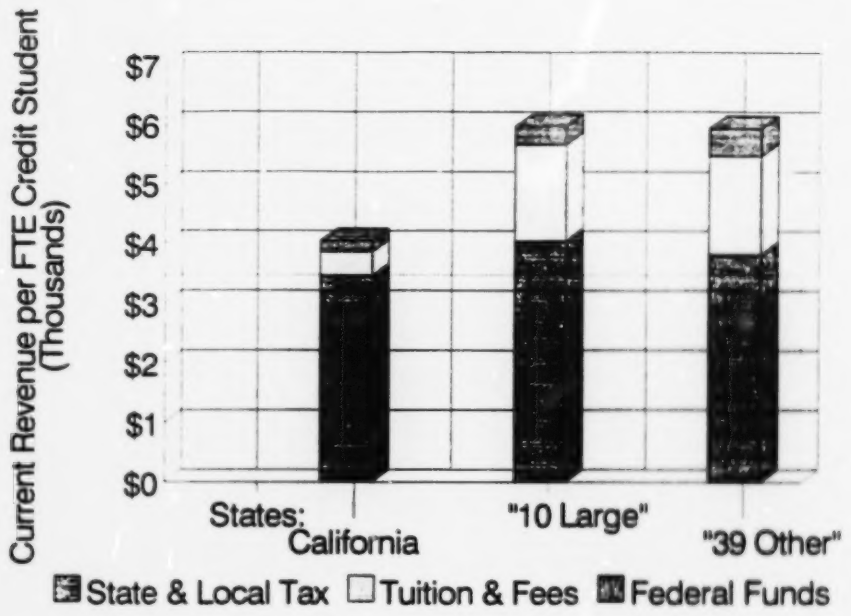
Chart 3
Tax Efforts for Community Colleges
1965-95 Actual; 1996-2005 Estimated



Sources: Chancellor's Office, Research and Analysis Unit, May 1997

Notes: GF: General Fund Tax Revenues for Community Colleges
PT: Property Tax Revenues for Community Colleges
AV: Assessed Valuation
PI: Personal Income

Chart 4
Average Tax and Fee Revenue Per Student
Community Colleges
1993-94



Sources: NCES, E.D. TABS, September 1996.
Chancellor's Office, April 1997.

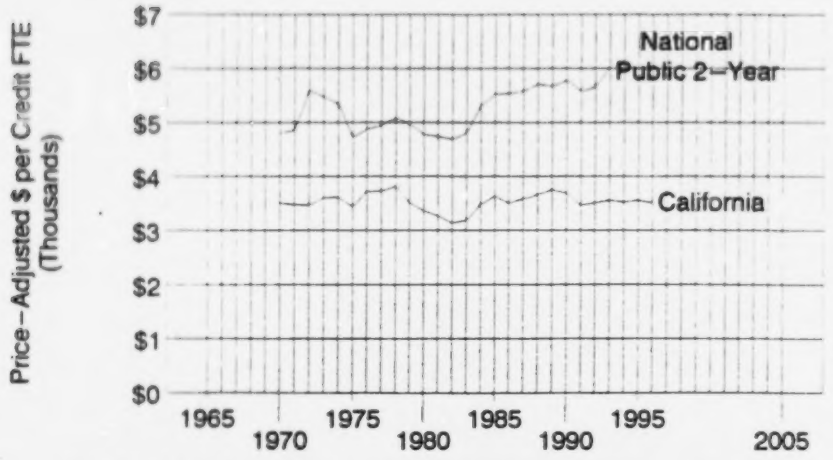
Notes: The ten large states include Arizona , Florida, Illinois, Michigan, New York, North Carolina, Ohio, Pennsylvania, Texas, and Washington.

Chart 5
Community Colleges Revenues
1993-94 (in $/Credit FTE)

	Tuition Fees	State and Local Tax	Federal	Other	Total
CALIFORNIA	$405	$3,454	$189	$477	$4,525
"8 LARGE"	$1,614	$3,962	$321	$705	$6,602
Arizona	$1,173	$3,403	$268	$417	$5,261
Florida	$1,513	$3,545	$292	$592	$5,942
Illinois	$1,190	$3,633	$367	$741	$5,930
Michigan	$2,040	$4,207	$302	$738	$7,286
New York	$2,425	$4,406	$128	$647	$7,606
Pennsylvania	$2,224	$3,319	$330	$592	$6,465
Texas	$1,191	$4,234	$470	$751	$6,646
Washington	$1,560	$4,502	$343	$1,109	$7,513
North Carolina	$809	$5,522	$297	$587	$7,215
Ohio	$2,457	$3,516	$170	$760	$6,904
States: California	$405	$3,454	$189	$477	$4,525
"10 Large"	$1,618	$4,039	$308	$700	$6,665
"39 Other"	$1,653	$3,814	$465	$768	$6,701
		PERCENT DISTRIBUTION			
CALIFORNIA	9%	76%	4%	11%	100%
"8 LARGE"	24%	60%	5%	11%	100%
Arizona	22%	65%	5%	8%	100%
Florida	25%	60%	5%	10%	100%
Illinois	20%	61%	6%	12%	100%
Michigan	28%	58%	4%	10%	100%
New York	32%	58%	2%	9%	100%
Pennsylvania	34%	51%	5%	9%	100%
Texas	18%	64%	7%	11%	100%
Washington	21%	60%	5%	15%	100%
North Carolina	11%	77%	4%	8%	100%
Ohio	36%	51%	2%	11%	100%
"10 LARGE"	24%	61%	5%	11%	100%
"39 OTHER"	25%	57%	7%	11%	100%

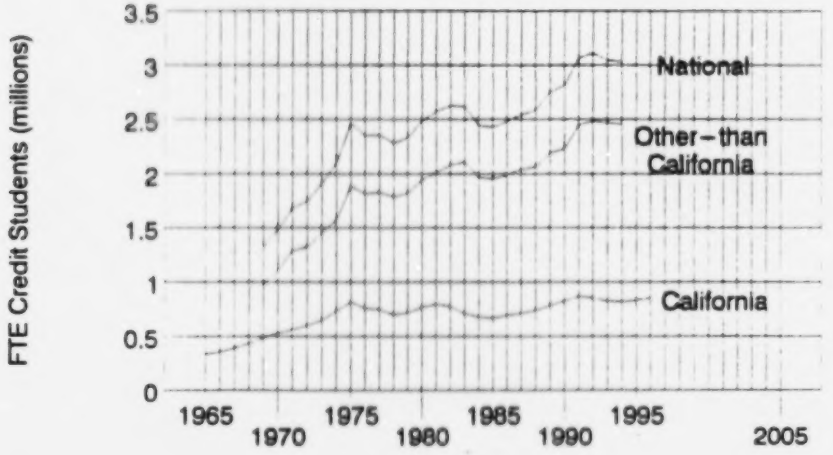
Sources: NCES, E.D. TABS, September 1996.
Chancellor's Office, April 1997.

Chart 6
Community Colleges
Constant E&G Expenditure per Credit FTE and FTE Credit Students
1970-95 Actual; 1996-2005 Estimated



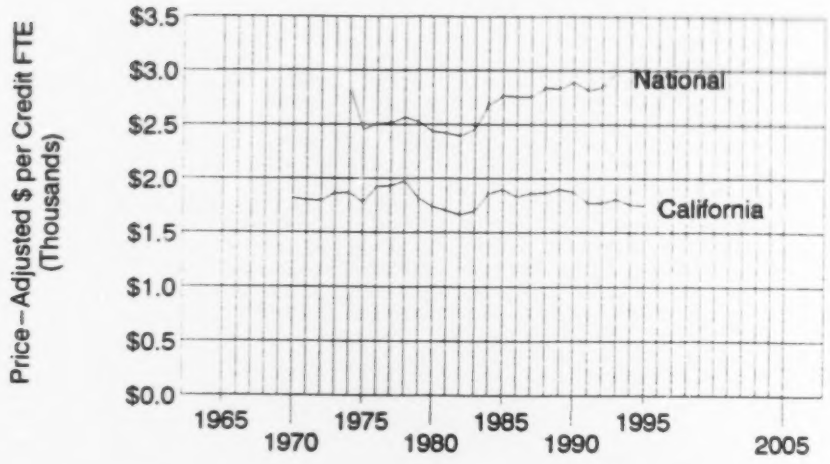
NOTE: Includes E&G Expenditures less Student Aid and Transfers from General Fund.

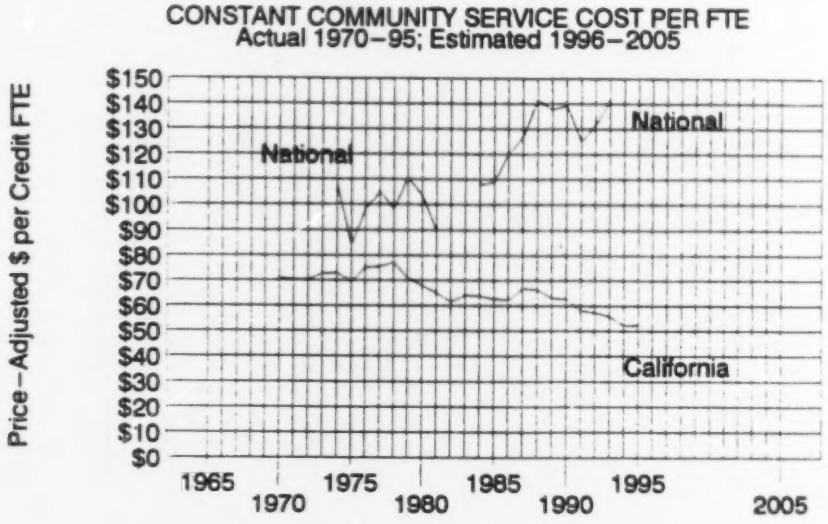
COMMUNITY COLLEGE FTE CREDIT STUDENTS
Actual 1965–95; Estimated 1996–2005



Sources: Chancellor's Office, Research and Analysis Unit, May 1997.

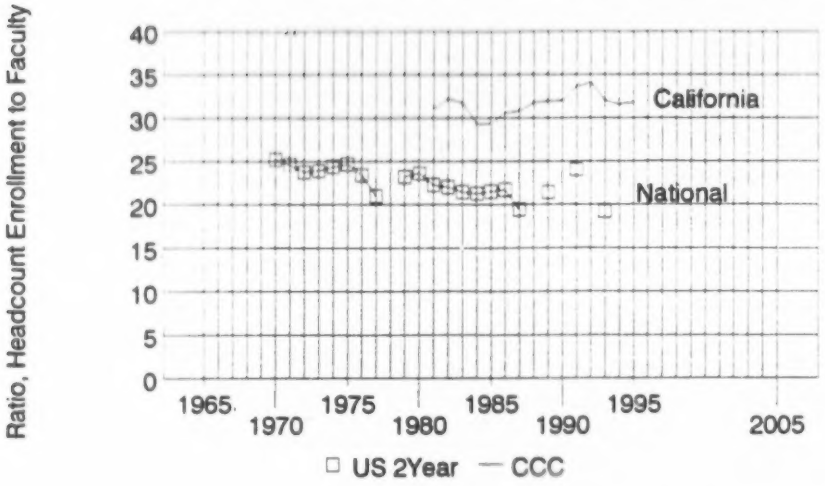
Chart 7
Constant Instructional Cost per Student and Constant Community Service Cost per FTE
1970-95 Actual; 1996-2005 Estimated





Sources: Chancellor's Office, April 1997.

Chart 8
Community College Student:Faculty Ratio
1965-95 Actual; 1996-2005 Estimated



FACTORS DEFINING STUDENT:FACULTY RATIOS

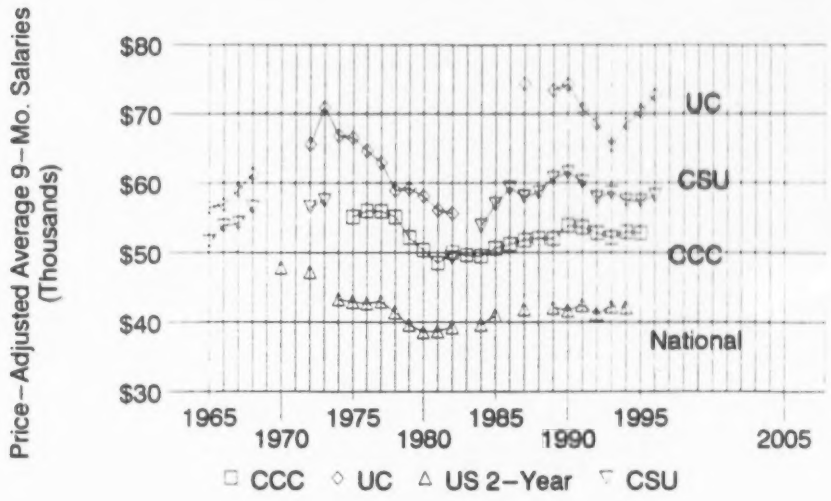
	FACULTY LOAD Weekly Faculty Contact Hours		CLASS SIZE Average Course Section Size	
	California	Other States	California	Other States
1989–90	17.5	15.4 *	29.2	19.5 *
1992–93	16.7	14.7 **	28.8	17.9 **

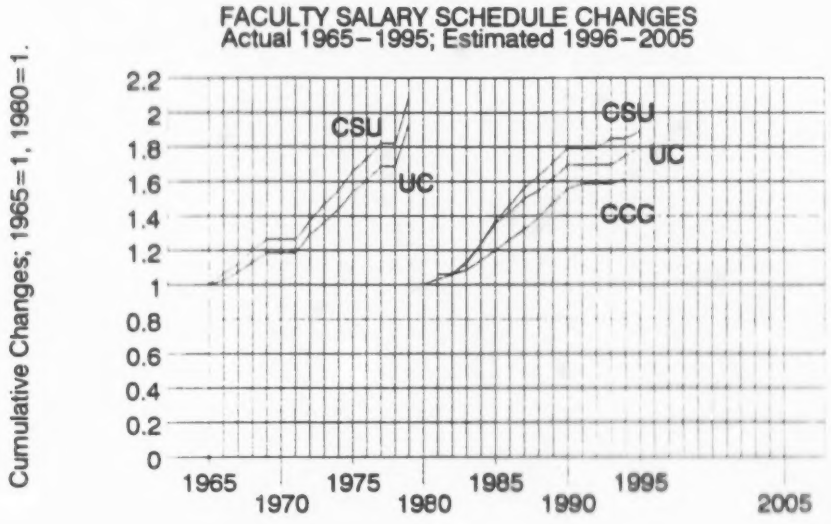
Sources: Chancellor's Office, Research and Analysis Unit, May 1997. Comparative Financial Statistics of Community Colleges, studies by National Association of College and University Business Officials (NACUBO). NCES Digest of Educational Statistics, 1996.

Notes: *Community Colleges in eight other large states (see Chart 5).

**Based on reports by 308 community college districts outside California.

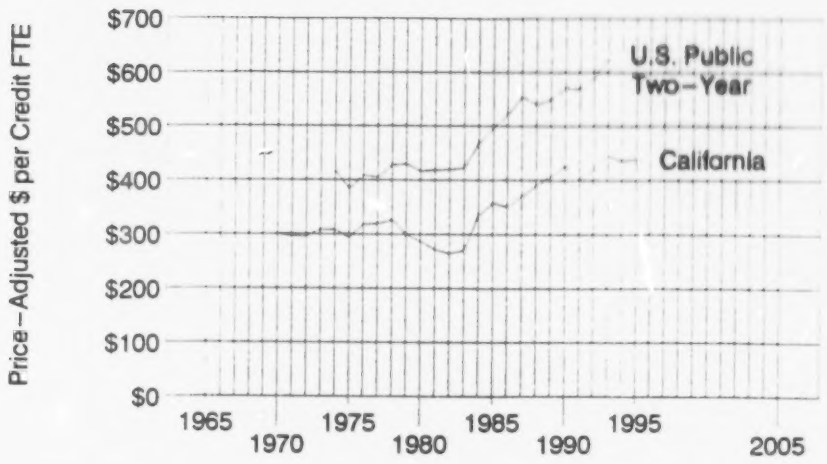
Chart 9
Average Salaries, Full-Time Faculty and Faculty Salary Schedule Changes
1965-95 Actual; 1996-2005 Estimated

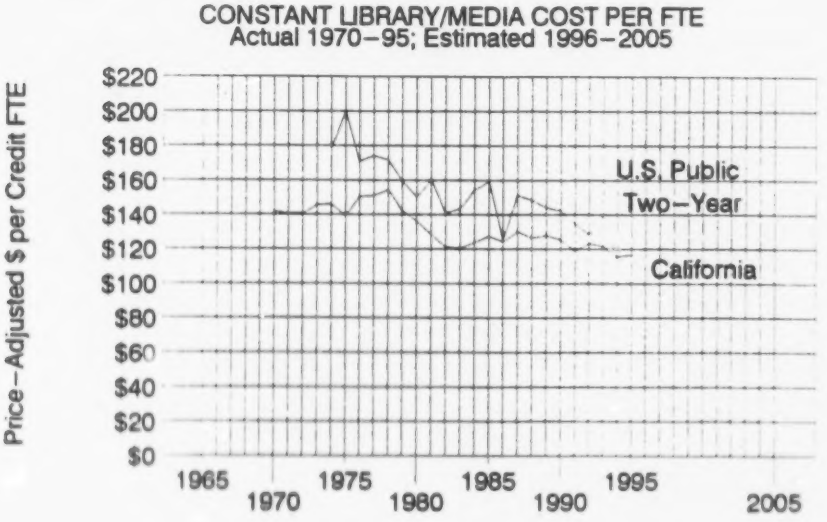




Sources: Chancellor's Office, NCES, California Postsecondary Education Commission May 1995.

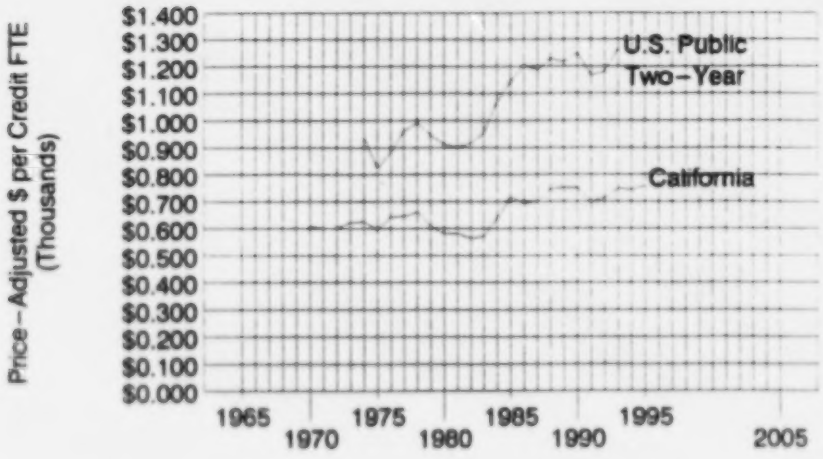
Chart 10
Constant Student Service Cost per FTE and
Constant Library/Media Cost per FTE
1970-95 Actual; 1996-2005 Estimated

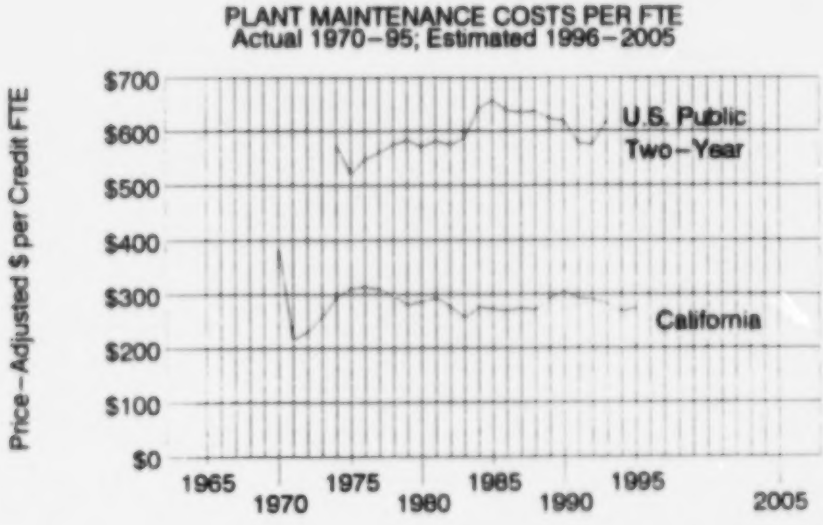




Sources: Chancellor's Office, Research and Analysis Unit, May 1997.

Chart 11
Community Colleges
Administrative Costs per FTE and
Plant Maintenance Costs per FTE
1970-95 Actual; 1996-2005 Estimated





Sources: Chancellor's Office, Research and Analysis Unit, May 1997.